

ABSTRACT

5 The present invention is a method and apparatus for protecting a power supply from electrical faults. The present invention operates substantially independently of the current drawn by the load. In addition, the present invention includes a time delay
circuitry for preventing false detection of ground faults when the power source is
connecting to the load. In a preferred embodiment, the apparatus of the present invention
includes a control circuitry for connecting the power supply to the load. The apparatus also
preferably includes a sensor circuitry for detecting electrical faults, including ground,
transient, and arc faults, and triggering the control circuitry to disconnect the power source
10 from the electrical faults when electrical faults are detected. Thus, the present invention can
protect wiring and load connections from improper operation and fire hazards that may be
caused by electrical faults. Finally, the apparatus preferably includes a fault protection
condition indicator to indicate whether the circuit breaker circuitry is working properly.

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